

NASA's Deep Impact Mission: Decision Making

Timing is Everything

STUDENT PLANNING GUIDE

BACKGROUND INFORMATION

Directions: Using the information gathered in your expert group, determine the requirements, benefits, and limitations of each type of observation strategy. This planning sheet will then be used by your group to build a scenario identifying exactly how the mission will be planned. In other words, how much importance, if any, will be given to the secondary collection methods?

The primary source of data is observing, using the instruments on the **Deep Impact spacecraft** and timing of the impact so that the most information is sent back and received by the Deep Space Network.

Requirements:



Peter West

Benefits (science value):

Limitations:

Another source of data is studying **Earth-based observatories** for optical observations and timing such that the impact will take place when the comet is visible through the telescope of more than one major observatory.

Requirements:

Benefits (science value):

Limitations:

Earth orbital facilities, including the Hubble Space Telescope is another source of data that is not dependent on weather on Earth.

Requirements:

Benefits (science value):

Limitations: